

IN THE SPECIFICATION

Page 4, lines 31-35, replace by:

Figure 1 shows the alignment of the serine/threonine (S/T) kinase domain (I-VIII) of related receptors from transmembrane proteins, including embodiments of the present invention. The nomenclature of the subdomains is accordingly to Hanks et al. (1988). The amino acid sequences are set forth at amino acids 246-427 of SEQ ID NO: 32, 216-391 of SEQ ID NO: 31, 194-368 of SEQ ID NO: 30, and 1-178 of SEQ ID NO: 33.

Page 5, lines 3-8: replace by:

Figure 3 is a comparison of the amino-acid sequences of human activin type II receptor (Act R-II), mouse activin type IIB receptor (Act R-IIB), human TGF- type II receptor (TR-II), human TGF- type I receptor (ALK-5), human activin receptor type IA (ALK-2), and type IB (ALK-4), ALKs 1 & 3 and mouse ALK-6. See SEQ ID NOS: 30, 31, 32, 10, 2, 4, 6, 8, and 18.

Page 5, lines 12-14: replace by:

Figure 5 shows the sequence alignment of the cysteine-rich domains of the ALKs, TR-II, Act R-II, Act R-IIB and daf-1 receptors. See positions 34-95 of SEQ ID NO: 2, 35-99 of SEQ ID NO: 4, 61-130 of SEQ ID NO: 6, 34-100 of SEQ ID NO: 8, 36-106 of SEQ ID NO: 10, 30-110 of SEQ ID NO: 30, 29-109 of SEQ ID NO: 31, 51-143 of SEQ ID NO: 32, and 5-101 of SEQ ID NO: 34.

Page 20, Table 2, replace by:

KINASE	SUBDOMAINS (SEQ ID NOS:)	
	VIB	VIII
Serine/threonine kinase consensus	DLKPEN 35	G (T/S) XX (Y/F) X 37-40
Tyrosine kinase consensus	DLAAFN 36	XP (I/V) (K/R) W (T/M) 41-48
Act R-II	DIKSKN Amino acids 322-327 of SEQ ID NO: 30	GTRRYM Amino acids 361-366 of SEQ ID NO: 30
Act R-III	DFKSKN Amino acids 345-350 of SEQ ID NO: 31	GTRRYM Amino acids 361-366 of SEQ ID NO: 31
TyR-II	DLKSSN Amino acids 379-384 of SEQ ID NO: 32	GTARYM Amino acids 420-425 of SEQ ID NO: 32
ALK-I	DFKSRN Amino acids 330-335 of SEQ ID NO: 3	GTKRYM 29
ALK-2, -3, -4, -5, & -6	DLKSKN 28	GTKRYM 29

IN THE SEQUENCE LISTING

Please replace the current paper copy of the sequence listing with the attached, and replace the computer readable form thereof with the computer readable form transmitted to the USPTO on April 6, 2004, in parent application 09/903,068.

The undersigned hereby declares that, to the best of his knowledge, the paper copy and computer readable form referred to herein are identical to each other and to information in the application as filed. No new matter is believed presented.